Specifications for Direct Write Laser Lithography System

BRAND NAME OR EQUAL: Model # MW2: MicroWriter2 System or Equal

A flexible maskless direct write laser photolithography system designed for rapid prototyping and small volume manufacture for R&D applications is required. System shall include:

Compact footprint requiring less than 4 square meters of floor space.

Operation from standard 120V power outlet, max 10 amps.

High-performance 3 axis motion stage with 300mm travel in x and y directions.

Temperature stabilization system to within 0.2 degrees Celsius.

Autofocus, Auto calibration and vibration isolation.

Control PC running latest version of Windows 7 operating system.

Full software control of process including advanced mask design.

Multiple 405 nm lasers to include:

0.6 micron spot size laser for writing fine features.

High power 1.0 micron spot size laser for standard feature writing.

Multiple 5 micron lasers for high speed writing over large areas.

Lithographic patterning with feature size down to 0.6 microns.

Write speeds up to 180 mm²/minute.

Wafer stage with vacuum chuck capable of holding 230 mm diameter wafers.

Low and high magnification optical cameras for alignment.

Scanning Laser Microscope for feature alignment and pattern analysis.